IN THE ABSTRACT:

Delete the current Abstract and replace therewith the attached substitute Abstract.

There is provided an An ophthalmologic photocoagulator and photoagulation method thereof in which visibility of sighting laser beam which is projected onto the eye fundus of an eye to be examined is improved and a loss in the amount of treatment laser beam can be reduced. The ophthalmologic photocoagulator includes: a treatment laser oscillator that oscillates a treatment laser beam for conducting treatment on a diseased part of the eye to be examined by photocoagulation; a sighting laser oscillator that oscillates a sighting laser beam for conducting sighting on the diseased part of the eye to be examined which is to be irradiated with the treatment laser beam; and a polarization beam splitter for combining an optical path of the treatment laser beam with an optical path of the sighting laser beam by polarization coupling. The treatment laser beam oscillating from the treatment laser oscillator and the sighting laser beam oscillating from the sighting laser oscillator have similar colors.